

REMARKS

Applicants respectfully request reconsideration of the application, as amended, in view of the following remarks.

The present invention as set forth in **Claim 1** relates to a thermoplastic resin composition, comprising:

a polyamide resin component comprising

(A) 5 to 95% by weight of a polyamide resin obtained by polycondensing diamine(s) including at least tetramethylenediamine with dicarboxylic acid(s) including at least adipic acid, based on a total amount of (A) and (B); and
(B) 95 to 5% by weight of a polyamide resin obtained by polycondensing diamine(s) including at least one of 1,9-nonanediamine and 2-methyl-1,8-octanediamine with dicarboxylic acid(s) including at least terephthalic acid, based on a total amount of (A) and (B).

In contrast, Yamagishi et al fail to disclose or suggest the specific combination of (A) 5 to 95% by weight of a polyamide resin obtained by polycondensing at least **tetramethylenediamine and at least adipic acid**; and (B) 95 to 5% by weight of a polyamide resin obtained by polycondensing **at least one of 1,9-nonanediamine and 2-methyl-1,8-octanediamine and at least terephthalic acid**, as claimed in Claim 1.

In addition, as discussed on January 7, 2004, the superior properties of the claimed composition are illustrated by the results in Table 3, second part, at page 34 of the specification, copy of which is provided below.

Table 3 (Second Part)

| Evaluation Result | | | | | | | |
|---------------------|---|-----------------------------|----------------------|---------------------------|--------------------------------|-------------|--|
| | | Mechanical Strength | | Tensile Elongation [%] | Blister Resistance [pieces] | Moldability | Friction Property mm ³ /N•km |
| | | Modulus in Flexure [MPa] | Weld Strength [%] | | | | |
| Example | 1 | 13,200 | 85 | 2.8 | 0 | A | 15x10 ⁻³ |
| | 2 | 13,300 | 80 | 2.8 | 0 | A | 15x10 ⁻³ |
| | 3 | 13,100 | 85 | 2.8 | 0 | A | 15x10 ⁻³ |
| | 4 | 12,800 | 85 | 2.9 | 0 | A | 16x10 ⁻³ |
| | 5 | 13,200 | 85 | 2.8 | 0 | A | 15x10 ⁻³ |
| | 6 | 13,200 | 85 | 2.8 | 0 | A | 15x10 ⁻³ |
| | 7 | 3,300 | 92 | 30 | 0 | A | 5x10 ⁻³ |
| Comparative Example | 1 | 12,000 | 85 | 2.8 | 10 | A | 15x10 ⁻³ |
| | 2 | 12,700 | 45 | 1.2 | 0 | B | 37x10 ⁻³ |
| | 3 | 3,100 | 92 | 30 | 5 | A | 5x10 ⁻³ |
| | 4 | 3,200 | 60 | 14 | 0 | B | 10x10 ⁻³ |

Examples 1-7 are according to the present invention. Comparative Examples 1 and 3 are representative for data pertaining to nylon 4,6 (A), and Comparative Examples 2 and 4 pertain to the semi aromatic polyamide (B).

In the attached illustration, the upper part relates to Comparative Examples 3 and 4 and Example 7, the lower part relates to Comparative Examples 1 and 2, and Examples 1-6.

Superior results are obtained for the compositions according to the present invention for both blistering and molding behavior. The levels of these properties are higher than could be expected based on the weighted averages for the properties of the individual polyamides or compositions thereof as according to Comparative Examples. (See Table 3, second part as reproduced above and the attached illustration of the data).

In addition, the flexural modulus of the composition according to the invention is higher than the value calculated from the blending ratio of the polyamide (A) to the polyamide (B), whereas the friction coefficient becomes lower than the value calculated from the blending ratio of the polyamide (A) to the polyamide (B).

Compare in this respect Example 1-6 with Comparative Examples 1 and 4 (filled compositions), and Example 7 with Comparative Examples 3 and 4 (unfilled compositions).

Moreover, weld strength and tensile elongation remain at the good level of polyamide-4,6 without any significant reduction due to the presence of polyamide (B).

Examples 1-7 have a good property level for all three aspects considered (blister resistance, moldability and friction resistance), whereas all four Comparative Examples have at least one such property which is insufficient. These results already show clearly the surprising effect that the claimed compositions have good properties in all three aspects, and not a mere average of the properties of the more extreme compositions. (See Table 3, second part as reproduced above and the attached illustration of the data).

The above results are not disclosed or suggested by Yamagishi et al.

Therefore, the rejection of Claims 1-17 and 19-20 under 35 U.S.C. § 103(a) over Yamagishi et al is believed to be unsustainable as the present invention is neither anticipated nor obvious and withdrawal of this rejection is respectfully requested.

The rejection of Claims 8-12, 14-16 and 19 under 35 U.S.C. § 112, 2nd paragraph, is obviated by the amendment of Claims 9, 11, 15 and 16.

In regard to Claim 8, Applicants note that it depends on Claim 1. The polyamide resin of component (A) is obtained by polycondensing **diamine(s)** including at least tetramethylenediamine. Thus, Claim 8 defines the diamines that may be present in addition to tetramethylenediamine.

In regard to Claims 10 and 12, Applicants note that they depend on Claim 1. The polyamide resin of component (A) is obtained by polycondensing dicarboxylic acid(s) including at least adipic acid. Thus, Claims 10 and 12 define the dicarboxylic acid that may be present in addition to adipic acid.

In regard to Claim 14, Applicants note that it depends on Claim 1. The polyamide resin of component (B) is obtained by polycondensing diamine(s) including at least one of 1,9-nonanediamine and 2-methyl-1,8-octanediamine. Thus, Claim 14 defines the diamines that may be present in addition to at least one of 1,9-nonanediamine and 2-methyl-1,8-octanediamine.

Therefore the rejections of Claims 8, 10, 12 and 14 as being indefinite should be withdrawn.

With respect to withdrawn Claim 18, Applicants note that it depends from Claim 1. Thus, if Claim 1 is allowable, Claim 18 should be allowable as well.

Applicants respectfully request that the Examiner acknowledge that the references cited in the **Information Disclosure Statement**, filed in the above-identified application on

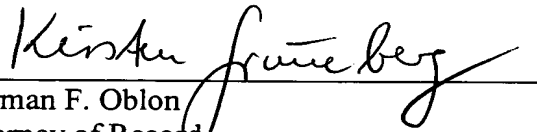
Application No.: 09/886,256
Amendment Dated: January 23, 2004
Reply to Office Action of: October 23, 2003

March 26, 2003, have been considered. For the Examiner's convenience a copy of Form PTO 1449 as filed on March 26, 2003, is attached herewith.

This application presents allowable subject matter, and the Examiner is kindly requested to pass it to issue. Should the Examiner have any questions regarding the claims or otherwise wish to discuss this case, he is kindly invited to contact Applicants' below-signed representative, who would be happy to provide any assistance deemed necessary in speeding this application to allowance.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

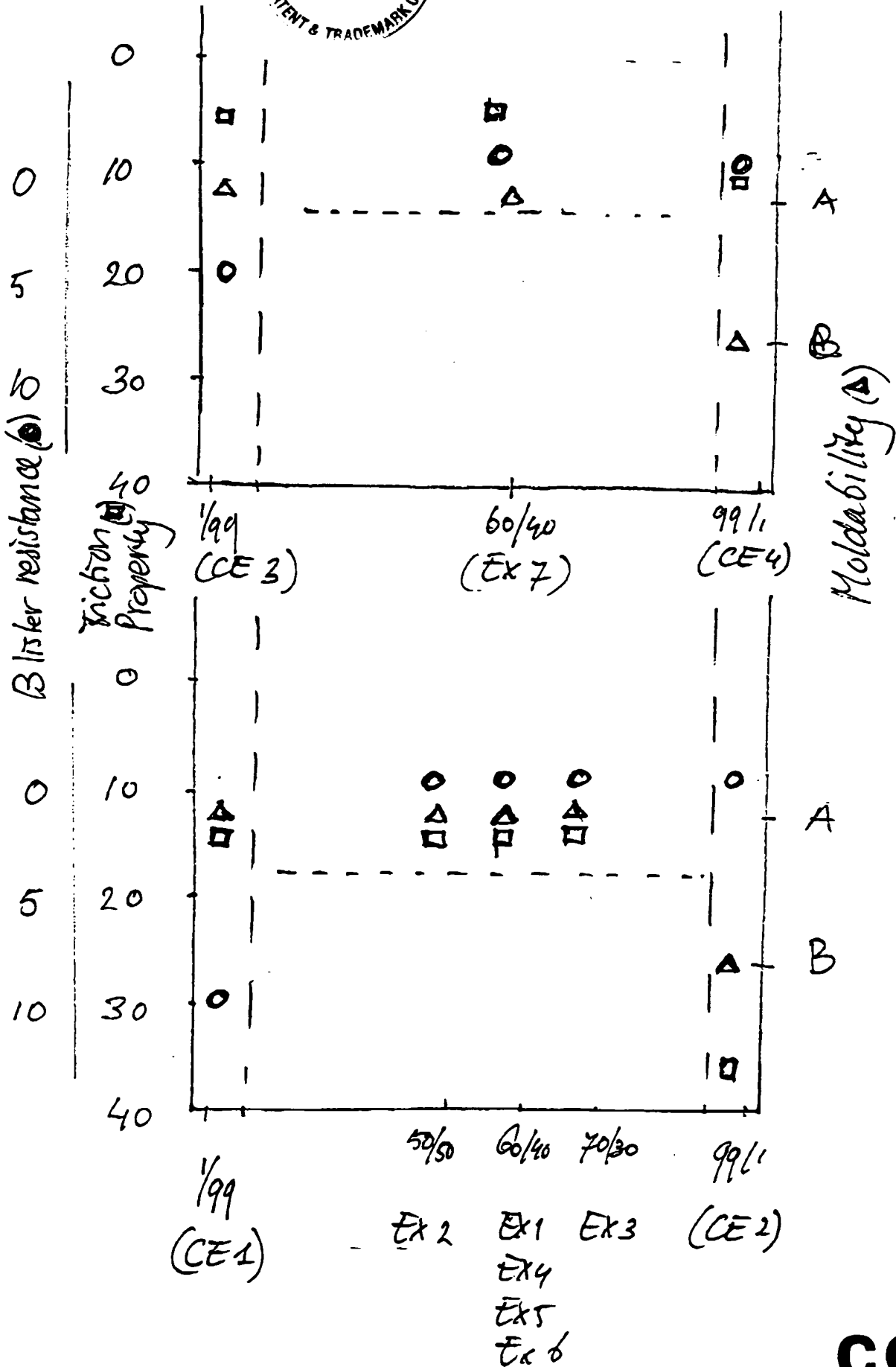
A handwritten signature in black ink, appearing to read "Norman F. Oblon", written over a horizontal line.

Norman F. Oblon
Attorney of Record
Registration No.: 24,618

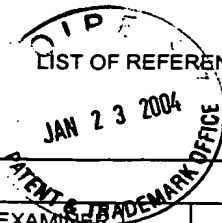
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| Form PTO 1449 (Modified) | | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | | ATTY DOCKET NO. 210241US0 | | SERIAL NO. 09/886,256 | |
| <div style="text-align: center;">  <p>LIST OF REFERENCES CITED BY APPLICANT</p> </div> | | | | APPLICANT Masaaki MAWATARI, et al. | | | |
| | | | | FILING DATE June 22, 2001 | | GROUP 1714 | |
| U.S. PATENT DOCUMENTS | | | | | | | |
| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB CLASS | FILING DATE IF APPROPRIATE |
| | AA | 4,716,214 | 12/29/87 | R. J. GAYMANS, et al. | | | |
| | AB | | | | | | |
| | AC | | | | | | |
| | AD | | | | | | |
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| FOREIGN PATENT DOCUMENTS | | | | | | | |
| | | DOCUMENT NUMBER | DATE | COUNTRY | TRANSLATION | | |
| | | | | | YES | NO | |
| | AO | 0 976 774 | 02/02/2000 | EUROPE | | | |
| | AP | | | | | | |
| | AQ | | | | | | |
| | AR | | | | | | |
| | AS | | | | | | |
| | AT | | | | | | |
| | AU | | | | | | |
| | AV | | | | | | |
| OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.) | | | | | | | |
| | AW | Patent Abstracts of Japan, JP 09-012875, January 14, 1997 | | | | | |
| | AX | | | | | | |
| | AY | | | | | | |
| | AZ | | | | | <input type="checkbox"/> Additional References sheet(s) attached | |
| Examiner | | | | | Date Considered | | |
| *Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. | | | | | | | |

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